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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/719,546	12/22/2000	Steven J. Hensen	LC-355PCT US	9980

7590 09/04/2002

Loctite Corporation
Legal Department
1001 Trout Brook Crossing
Rocking Hill, CT 06067

EXAMINER

BLANTON, REBECCA A

ART UNIT	PAPER NUMBER
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1762

DATE MAILED: 09/04/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/719,546

Applicant(s)

HEMSEN, STEVEN J.

Examiner

Rebecca A. Blanton

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 33-35 is/are allowed.
- 6) ☒ Claim(s) 1-11, 15-26, 30 and 31 is/are rejected.
- 7) ☒ Claim(s) 12-14, 27-29 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8-11, 15-16, 18-26, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Young (U.S. 4,311,735).

Regarding claims 1, 9, and 18, Young discloses an apparatus and process for impregnating porous articles (abstract). Young teaches that the porous article is placed in a vessel, which is then subjected to a vacuum, followed by supplying impregnant into the vessel and returning the vessel to ambient pressure so as to force the impregnant into the pores of the substrate article (column 2 lines 9-16). Young also teaches that the impregnation process can be carried out in a tank, wherein the basket containing the impregnated porous substrate is removed and placed into an oven (column 1 lines 37-47).

The examiner notes that in the specification the applicant appears to intend for each step of the impregnation process to occur in a different station, however, the claims read on carrying out the steps of the impregnation process in one station.

Referring to claims 2, and 19, Young teaches that a vacuum is applied to the porous substrate prior to impregnation so as to remove the air from the pores (column 2 lines 35-42 and column 3 lines 52-54).

Regarding claims 3 and 22, the reference teaches in column 3 lines 60-62 that that the vacuum is broken after the impregnant is in contact with the substrate and positive pressure is applied.

Referring to claims 4 and 21, Young teaches that the substrate is a porous article that is placed in a vessel, then subjected to a vacuum, during which time the substrate is immersed in an impregnating solution, followed by releasing the vacuum and applying pressure so that the porous article becomes impregnated with the impregnant (abstract).

Regarding claims 5, 6, 15, 16, and 23, Young teaches that the unused impregnant solution is drained from the impregnation vessel via a pump (column 3 lines 60-62).

Referring to claims 8 and 24, in column 2 lines 43-47, the reference teaches that the impregnated porous substrate may be centrifuged to remove excess impregnant.

Regarding claims 10 and 25, Young teaches that once the porous substrates have been impregnated, the impregnant is cured, so as to solidify the impregnant (column 4 lines 3-9).

Referring to claims 11 and 26, Young teaches that the porous substrate is impregnated with a heat curable resin composition (column 1 lines 27-47).

Regarding claim 20 and 30, Young teaches that the basket containing the porous substrate may be a mobile vessel, which is removed from the impregnation apparatus and placed into an oven to cure the impregnant (column 1 lines 43-46).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 7, 17, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Young (U.S. 4,311,735).

Regarding claims 7 and 17, Young discloses an impregnation process wherein the substrate is placed into a basket, which is filled with impregnant under vacuum and is then subjected to a pressurizing process, as described above. Young teaches that the basket containing the impregnated substrate is removed from the apparatus following the impregnation process (column 1 lines 43-46). Young does not specifically teach that the basket should be tipped sideways to recover the unused impregnant, however, Young does teach that the unused impregnant is to be recovered. It is well-known that some impregnant would remain on the bottom of the basket following the impregnation process, therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to tip the basket, containing the impregnated

substrate, sideways so as to remove the excess impregnant, so as to recover the unused impregnant, as taught by Young.

Regarding claim 31, Young teaches that the basket containing the porous substrate may be a mobile vessel, which is removed from the impregnation apparatus and placed into an oven to cure the impregnant (column 1 lines 43-46). The examiner takes official notice that it is well known in the art to use a human operator to transport a reaction vessel from one system to another, such as removing the basket from the impregnating station to an oven.

Allowable Subject Matter

Claims 12-14, 27-29, and 32 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Referring to claims 12-14 and 27-29, the applicant's limitation of deareating the impregnating solution prior to contacting it with the substrate distinguishes over Young because the reference makes no mention of deareating the impregnating solution.

None of the prior art of record teaches or makes obvious the applicant's claimed invention of deareating an impregnating solution followed by contacting it with a substrate in a vacuum and releasing the vacuum to force impregnant into the pores.

Regarding claim 32, the applicant's limitation that the directing means includes a logic controller distinguishes over Young because Young does not mention the presence of a logic controller.

None of the prior art of record teaches or makes obvious the applicant's claimed invention of an impregnating apparatus that includes a logic controller to carry out the system functions.

Claims 33-35 are allowed.

Claims 33-35 are allowed because the applicant's limitation that the impregnating solution is deareated prior to contacting it with the substrate distinguishes over Young because the reference makes no mention of deareating the impregnating solution.

None of the prior art of record teaches or makes obvious the applicant's claimed invention of deareating an impregnating solution followed by contacting it with a substrate in a vacuum and releasing the vacuum to force impregnant into the pores.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 5,256,450 to Catena: The reference discloses an impregnation process comprising a centrifuge to remove excess impregnant.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rebecca A. Blanton whose telephone number is 703-605-4295. The examiner can normally be reached on M - F (7:30am - 3:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P. Beck can be reached on 703-308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

rab 
September 3, 2002


MICHAEL BARR
PRIMARY EXAMINER